

Appl. No. 10/675,303

Reply to Office Action of September 6, 2006

and Notice of Noncompliant Amendment of
January 4, 2007

This listing of claims will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS

1. (currently amended) A method to adapt a hearing device, comprising:
 - 5 providing evaluation data for various predetermined auditory situations;
adapting the hearing device to a hearing aid device user with individual
weighting via a continuous weighting function that runs via
supporting points that respectively represent an individual weighting
of the evaluation data of one of the predetermined auditory
10 situations, wherein the evaluation data comprise weighting vectors
with regard to specific audio signals that are characteristic of the
predetermined auditory situations; and
determining the weighting vectors by performing an eigenvector analysis
of the specific audio signals.
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2. (original) The method according to claim 1, further comprising:
 - performing a sound signal analysis; and
 - determining the evaluation data based on results of the sound signal
analysis.
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- 3-4. (cancelled).
5. (original) The method according to claim 1, further comprising determining the
weighting function for the individual weighting from auditory situations
25 characteristic for the hearing device user.

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6. (original) The method according to claim 1, further comprising determining the weighting function from at least one adaptation parameter and at least one value of the evaluation data.

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7. (currently amended) A method for operating a hearing device, comprising:

recording an audio signal of a current auditory situation;

calculating signal evaluation data from the audio signal;

weighting the signal evaluation data utilizing a continuous weighting

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function that is acquired by ~~according to one or more of the~~
~~following:~~

~~a) utilizing supporting points that respectively represent an~~
~~individual weighting of the evaluation data of a~~
~~predetermined auditory situation;~~

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~~b) utilizing weighting vectors with regard to specific audio signals~~
~~that are characteristic of a the predetermined auditory~~
~~situation;~~

~~c) utilizing weighting vectors determined by performing an~~
~~eigenvector analysis of the specific audio signals;~~

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~~d) utilizing weighting vectors that are determined for the individual~~
~~weighting from auditory situations characteristic for the~~
~~hearing device user; and~~

~~e) utilizing at least one adaptation parameter and at least one value~~
~~of the evaluation data;~~

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adapting the hearing device according to the weighted signal evaluation
data to the current auditory situation; and

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determining the weighting vectors by performing an eigenvector analysis
of the specific audio signals.

8. (original) The method for operating a hearing device according to claim 7,
5 wherein the adapting of the hearing device is performed under real-time
conditions.

9. (currently amended) A device to adapt a hearing device, comprising:

10 a storage device configured to provide evaluation data for various
predetermined auditory situations;
an adaptation device configured to adapt the hearing device to a hearing
aid device user using individual weighting;
a continuous weighting function configured to implement, with the
adaptation device, the individual weighting , the continuous
15 weighing function configured to run via supporting points which
respectively represent an individual weighting of the evaluation data
of one of the predetermined auditory situations of the storage
device, wherein the evaluation data comprise weighting vectors
with regard to specific audio signals that are characteristic of the
20 predetermined auditory situations; and
an analysis device with which the weighting vectors can be determined via
eigenvector analysis of the specific audio signals.

10. (original) The device according to claim 9, further comprising:
25 a sound signal analysis device with which the evaluation data can be
determined for the predetermined situations, and from which the
evaluation data can be transferred to the storage device.

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11-12. (cancelled).

13. (original) The device according to claim 9, further comprising an offline
5 adjustment device configured to determine the weighting function for the
individual weighting from auditory situations characteristic for the hearing device
user.

14. (original) The device according to claim 13, wherein the weighting function
10 can be determined from at least one adaptation parameter and a plurality of the
evaluation data via the offline adjustment device.

15. (currently amended) A hearing device, comprising:

15 a recording device configured to record an audio signal of a current
auditory situation;

a computer device configured to calculate signal evaluation data from the
audio signal;

a weighting device configured to weight the signal evaluation data with the
aid of a continuous weighting function;

20 a control device or regulation device configured to adapt the hearing
device according to the weighted signal evaluation data to the
current auditory situation, wherein the evaluation data comprise
weighting vectors with regard to specific audio signals that are
characteristic of a predetermined auditory situation, and;

25 an analysis device with which the weighting vectors can be determined via
eigenvector analysis of the specific audio signals.

Response under 37 CFR §1.116 **expedited procedure** . Examining Group: 2615 (MPEP 714.13)

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16. (original) The hearing device according to claim 15, wherein the control device or regulation device is configured to adapt under real-time conditions.